



Record of Decision

For the

TABLE MOUNTAIN Wind Energy Study

MAY 1984



U.S. Department of the Interior

Bureau of Land Management El Centro Resource Area

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DECISION DOCUMENT

FOR THE

TABLE MOUNTAIN STUDY AREA

WIND ENERGY DEVELOPMENT

Bureau of Land Management Library Bldg 50. Denver Federal Center Denver, CO 80225

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TABLE MOUNTAIN WIND ENERGY DEVELOPMENT DRAFT RECORD OF DECISION (ROD) CA-14633

I. Proposed Action

Preliminary results of a California Energy Commission wind resource study for San Diego County indicate that the Table Mountain area may have a high potential for wind-generated electrical power. An average wind speed of over 15 mph ranks part of the Table Mountain area as one of the top four sites in San Diego County for wind energy development. Private developers have expressed an interest in utilizing public lands in this area for wind energy development. The Bureau of Land Management administers approximately 6,500 acres in the Table Mountain area. The goal of this action is to determine which of these lands are suitable for wind energy development.

An Environmental Assessment (EA) has been prepared to determine the area's suitability for development. The parcels identified for development in this Draft Record of Decision were based on the findings of the EA

Following approval of this Record of Decision, competitive bidding for development rights on the approved parcels will be conducted. This auction will be announced in regional papers shortly after publication of the final decision. Only those approved parcels presently unencumbered by applications would be available. Conditional rights-of-way grants will be issued to successful bidders, with the caveat that further site-specific EAs may place additional constraints or mitigations on development. The successful bidders will be required to submit a plan of development within twelve months and to prepare a site-specific EA on their plan of development. The plan of development/EA will address areas of permanent and temporary disturbance, and location of turbines, roads, and transmission lines.

BLM will use the site-specific EAs as the primary tool for making determinations in the following three areas:

- -The sensitivity of the study area to wind-development-related intrusions;
- -The need for further study through an Environmental Impact Statement;
- -Additional site-specific mitigation measures.

II. Legal Constraints

San Diego Gas and Electric Company (SDG&E) has the California Public Utilities Commission (CPUC) license for providing power to San Diego and the region. Under the Public Utilities Regulatory Act of 1978, utilities such as SDG&E must interconnect all power from wind energy sources into their existing utility grid. The developer would be required to transmit the power to SDG&E's nearest substation for interconnection. The nearest substation to Table Mountain is approximately fifteen miles to the west.

III. Issues

The major issues associated with granting rights-of-way for wind energy development in the Table Mountain Study area would be the impacts of development on the area's cultural, visual, wildlife, and wilderness resources. Each potential conflict is described in detail below. Resolutions to the conflicts are presented in section VI.

Cultural Resources

Approximately 3,960 acres of the study area are included in an Area of Critical Environmental Concern (ACEC) designated by the 1981 Eastern San Diego County Management Framework Plan (MFP) in recognition of the area's outstanding cultural values. The Table Mountain Archaeological District, located in the northern portion of the study area and within the ACEC, is listed on the National Register of Historic Places. The Jacumba Discontiguous District, in the southern portion of the study area, has been evaluated and determined eligible for inclusion on the Register.

Over 200 archaeological sites have been recorded in the area. The sites collectively represent an unparralleled concentration of prehistoric habitation and workshop locations. The area is archaeologically unique. occurence of biotic and geologic factors have resulted in a remarkable archaeological record. There is no similar area in Southern California. Mountain is also noteworthy because of its special significance for Native Americans due to shamanistic links to the mountain and the area's status as a focal point for use. As a result, maintaining the area's environmental setting and character is very important. How would development affect existing sites and research potential on Table Mountain? Would development be compatible with Native American sacred values on the mountain itself? Would the environmental and visual integrity of the mountain be significantly effected by wind energy development?

Visual Resources

Based on Table Mountain's good (Class B) scenic quality, moderate-to-high visual sensitivity, and the high volume of use on Interstate 8. the area north of the highway was assigned to Visual Resource Management (VRM) Class II by the 1981 MFP. In this class, changes in form, line, color, and texture of the landscape caused by development should not be evident. Contrasts resulting from land uses may be seen but should not attract attention. South of the highway, public lands were assigned to VRM Class IV. In this class, visual contrasts may attract attention and be a dominant feature of the landscape in terms of scale. These guidelines are recommendations only and are not binding on management. Would development create landscape and contrast changes in excess of those recommended in each class area?

Wildlife

The diversity of wildlife species inhabiting the Table Mountain Study Area is quite high. Peninsular Bighorn Sheep are found just to the west and north of the area, and isolated sightings have been made within the study area over the last several years. Would wind energy development negatively effect any species in this area, particularly Bighorn sheep (for example, inducing greater levels of stress)?

Wilderness

The former Table Mountain Wilderness Study Area (WSA) is located within the study area. By <u>Federal Register</u> publication on December 30, 1982, the Secretary of the Interior removed certain lands administered by BLM from their status as Wilderness Study Areas, including WSAs of less that 5,000 acres. This included the 958-acre Table Mountain unit. Subsequent litigation on the Secretary's order currently is unresolved. However, as a result of a preliminary injunction on September 9, 1983, these areas are being managed to protect their wilderness values until the litigation is resolved.

Therefore, development on lands within the former Table Mountain WSA is subject to the requirements of the non-impairment criteria of the BLM's <u>Interim Management Policy</u> and <u>Guidelines for Lands Under Wilderness Review</u>. Actions must be temporary and capable of being reclaimed to a condition of being substantially unnoticeable in the area. Would wind energy developments meet these criteria?

IV. Other Land Uses

Recreation

Based on aerial visitor count data, the Table Mountain area receives approximately 3000 visitor use days annually. Major activities include sightseeing, rock collecting, off-road vehicle use on approved routes, hunting, horseback riding, backpacking, and hiking.

Minerals

As of November 8, 1983, there were nine mining claims within the study area. There is no current activity, except for annual assessment work.

Utility Corridors and Communications Sites

The southern portion of the area is crossed by a "ile-wide utility corridor designated in the 1981 MFP. SDG&E is constructing a 500kV transmission line within the corridor.

Two communications sites are located on a ridge a short distance north of Table Mountain.

Livestock Grazing

All public land in T17S, R8E is a part of the McCain Valley Grazing Allotment. However, there has been no use of the area by livestock for the past five years.

V. Alternatives Considered

Two alternatives were considered by the Environmental Assessment prepared for wind energy development in the study area. Public comments on these alternatives are discussed in the Final EA. Comments on the adequacy of the EA and on the need for an EIS are summarized in Table V-1.

Alternative 1: Full Development

All public lands within the study area would be available for wind energy development. Surface access would be provided to all portions of the study area. Site-specific mitigation measures would be developed in subsequent site-specific EAr or epared on plans of development. Procedures for competitive bidding, granting rights-of-way, and preparation of site-specific EAs would be as described under section I above.

Alternative 2: No Action

No wind energy development would be allowed. The action would continue current protection for all resource values.

ANALYSIS OF PUBLIC COMMENTS TABLE MOUNTAIN E.A. (as of 2-14-84)

COMMENTOR	ADD'TL INFO NEEDED ON DRAFT E.A.		DRAFT E.A. ADEQUATE		EIS NEEDED		PROPOSAL	
	Yes	No	Yes	No	Yes	s No	Pro	Con
Ken Bosley	N,	A	N/	A		N/A	Х	
County of San Diego Dept of Planning & Land Use		Х	х		х			Х
Harriet Allen	х			x		N/A		Х
Mrs. R. Landis	N,	Α_	N/	A		N/A		Х
Jan Townsend		Х	х			N/A		Х
Sierra Club - SD Chapter	N,	A_	N/	A		N/A		х
SDG&E		х	X			N/A	Х	
Mountain Defense League	Х			х	Х			Х
Desert Protective Council	х			х	х			х
Arch Survey Assoc - SC	N/	Α	N/	Α		N/A		х
Ronald V. May		х	х		х			х
Gilmer Boggs	N/	A	N/	Α		N/A		Х
Jerry L. Hull	Х			Х		N/A	Х	
IVC Museum Society	N/	Α	N/	A		N/A		х
SD Cty Arch Society		Х	X			N/A		х
Florence C. Shiper	X			х		N/A		х
Advisory Councel on His Pres	х		N/	Α		N/A		х
Assoc. for Trans- personal Anthropology Int	X		X			N/A		x
IVC Barker Museum	N/	Α	N/	A		N/A		Х
State Clearing House (Fish & Game) (Parks & Rec)	N/	i. :	N/			N/A N/A		
TOTAL	7	5	6	5	4		3	16

 ${\rm N/A}$ - Not specifically addressed

VI. Decision and Rationale

Wind energy development in Southern California is still in an early research and development phase. Development has centered in two areas, the San Gorgonio and the Tehachapi passes. Several hundred turbines have been erected in each pass. Due to the high quality of the wind energy resource in each pass, both areas provide developers with extensive opportunities to advance the state of the art of wind energy generation technology, windpark design, and measures to mitigate impacts on sensitive resources. Although the Energy Commission Study identified Table Mountain as an area with high wind energy values and little chance of impact to sensitive resources, the study was flawed in two respects. First, only one anemometer was used to obtain the wind resource values. Second, cultural resources were not considered when the no impact conclusion was reached. Each pass is already much more heavily impacted by past uses than Table Mountain, which is a nearly pristine, undisturbed area.

San Diego County has expressed general support for wind energy development. However, the County Department of Planning and Land Use was concerned over specific plans to develop Table Mountain. They commented that "Table Mountain has well documented values as a natural resource area. The development of wind towers...would represent an extreme change in the atmosphere and setting of the site. ...It would be unfair to the people of the United States to develop a proposal that would benefit individual entrepeneurs over the public when public lands are concerned." The Planning Department also noted the County Board of Supervisor's support of all the features of the 1981 MFP, and then stated that wind energy development on Table Mountain "appears to be a direct conflict with the Management Framework Plan and ACEC."

Given the relatively small amount of power which could be developed on Table Mountain, the availability of other areas in Southern California for wind energy research and development, the concerns raised by the County and the general public, and the limited economic return the government is likely to realize, the public would be better served by not allowing development of a windpark. Rather, we feel the cultural and visual resource values are of such magnitude that they should be protected.

Therefore, no development will be allowed north of interstate 8. South of the interstate, all public lands will be available for further consideration for development, although only those areas not encumbered by the existing wind energy application will be available for competitive bidding for development rights. Map 1 identifies those areas suitable for further consideration; Map 2 indicates the boundary of the ACEC, the former WSA, and the area encumbered by the existing application. The rationale for the decision follows.

Table Mountain ACEC

No development would be allowed within the Table Mountain Area of Critical Environmental Concern (T17S, R8E, Sections 26, 27, 28, 33, 34, 35, and those portions of T18S, R8E, Sections 3 and 4 north of Interstate 8). Development within the ACEC would create an "adverse impact" on the cultural resources of the Table Mountain Archaeological District, as defined by 36 CFR 800.36 (Final EA, p. 58). Any action that is inconsistent with the terms of an ACEC designation or would adversely impact an ACEC-protected resource is not permitted unless the Bureau determines that the public benefits of such an action outweigh the benefits of continuing the ACEC. Such would be the case for Table Mountain only if the criteria used in 1981 to designate this area were no longer valid. These criteria and their present validity follow:

<u>Criteria 1:</u> The designation must still be <u>relevant</u> to the resource values. The area has been added to the <u>National Register</u> since designation as an ACEC. Scenic and wildlife resources are still undisturbed.

<u>Criteria 2</u>: The designation must still be <u>important</u> locally, regionally and nationally. The values are more important than they were in 1981. The resources are considered irreplaceable. This is supported by both the local and regional Native American Community and the San Diego County Planning Department.

Criteria 3: The designation must still be critical; that is, the designation must be necessary to prevent adverse impacts. At Table Mountain, this concerns the high potential for human impacts on the resource. The cultural resources on Table Mountain are fragile, sensitive, rare and irreplaceable. They are extremely vulnerable to impact because they are accessible and easily damaged. Special management remains necessary for protection.

<u>Criteria 4:</u> The designation must be <u>protectable</u> and <u>enforceable</u>. This requirement is of paramount consideration. If no development occured, the ACEC could be protected due to its size, shape, location, physiography, configuration, limited adjacent uses, and lack of access. Only by maintaining these factors can the integrity of the ACEC be maintained.

The Environmental Assessment disclosed no new information which would justify altering or deleting any of the ACEC decisions of the 1981 MFP. The EA did determine that development on Table Mountain would irrecoverably affect the visual integrity of Table Mountain archaeology. The environmental setting and character of the mountain would be permanently altered by developments, such as turbines, transmission lines, roads, and support facilities (Final EA, p. 58). There would be "irreparable" damage to Kumeyaay sacred values (ibid, p. 59). In addition, development would result in contrasts exceeding VRM Class II limits (ibid, p. 52). Construction of roads, turbines, and other facilities would result in removal of vegetation, causing the loss of topsoil due to the moderate to high erosion potential of the granitic soils in the area (ibid, p. 53). In addition to the impacts from erosion, the original vegetation would not be able to reestablish itself.

Former Table Mountain WSA

No development would be allowed within the former Table Mountain Wilderness Study Area (T17S, R8E, parts of sections 15 and 22). Construction of turbines and support facilities would constitute impairment of the area's suitability for wilderness (Final EA, p. 52). Resultant impacts would not be temporary. Facilities could not practically be removed and the area reclaimed to a condition of being substantially unnoticeable within the timefrome specified by the nonimpairment criteria (Final EA, p. 52). Wind energy development would not meet the criteria of BLM's Interim Management Policy and so is precluded.

Other Public Lands North of Interstate 8

No development would be allowed in those parts of T17S, R8E, sections 15, 21, and 22 outside the former Table Mountain WSA. This area topographically is a shallow valley between Table Mountain and the Jacumba Mountains. The southern half of the valley is within both the Table Mountain ACEC and the Archaeological District. Few sites have been recorded in the northern half of the valley; however, this area has never been surveyed. Therefore, it is possible

that the area is nearly as rich in cultural values as Table Mountain itself. The area is bordered on the south by the ACEC, on the northeast by the former Table Mountain WSA, and on its other borders by Anza-Borrego Desert State Park. Transmission lines and improved access roads would have to cross one or more of these areas. There is no evidence that this valley possesses a uniquely outstanding wind resource relative to the rest of the study area. A no development decision also prevents conflicts with bighorn sheep, which have occasionally been sighted in the western portion of the valley.

Public Lands South of Interstate 8

All public lands south of Interstate 8 are suitable for further consideration for wind energy development. The area is outside the Table Mountain ACEC. There are many existing impacts in the area, including Interstate 8, old highway 80, and the new SDG&E 500kV transmission line. Developments would not exceed the guidelines of VRM Class IV. No significant conflicts with wildlife would occur. Only those public lands not encumbered by the existing wind energy application would be available for competitive bidding for development rights, approximately 260 acres. Procedures for granting rights-of way and for permitting development would be as described under section I above.

However, part of this area is within the Jacumba Discontiguous Archaeological District. No development will be allowed until BLM meets full compliance with both section 106 of the National Historic Preservation Act (36 CFR 800) and the Programatic Memorandum of Agreement between the BLM, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation regarding cultural resources.

VII Mitigating Measures or Proposed Stipulations

Since the decision is based strictly on existing data, the following mitigating measures are reproduced in toto from the Environmental Assessment (pps. 66-76). The reader is cautioned, that on cursory examination, certain mitigations appear to conflict. However, without site-specific information, which will be provided by site specific inventories performed by the applicants, it is impossible to resolve these conflicts. Inventories will be performed according to all applicable BLM Manual standards, at the applicant's expense. It should be noted that these inventories could be expensive and time consuming (e.g., initiation of section 106 requirements for cultural resources). Mitigations which are standard operating requirements are not listed here.

Recreation

- 1. Use existing access routes whenever possible to minimize impacts to botanical resources and upland game habitat.
- 2. In areas where public use of new access roads would not create safety hazards or adversely affect botanical resources or game habitat, leave access roads open for public use.
- 3. Implement visual resource mitigations even in the seldom-seen zones in order to protect scenic values for recreationists using the area. (Section IV.B).

Realty

- 1. Equipment shall not be placed closer to the edge of the right-of-way for the Southwest Powerlink than the equipment's maximum height.
- 2. Move the receiver out of the path of wind turbine and transmitting station.
- 3. Instead of metal blades, use non-metallic material; wood, fiber glass, and composite materials for fewer electromagnetic effects.

Range

- 1. Schedule construction activity from March through October to minimize disruption of livestock grazing.
- 2. Install locked gates across roads where practical, to control access.

Visual Resources

- 1. Construct roads to follow natural landforms (curvilinear lines) rather than arbitrary straight lines.
- 2. Conceal roads by constructing them on the sides of ridges located away from the KOPs when possible.

- 3. Limiting access roads to areas having slopes of 25% or less in the foreground distance zone of VRM Class II areas. (Windfarm development would not meet class limitations in these areas).
- 4. Avoid "skylining" of turbine towers.
- 5. Paint all structures to match the characteristic landscape color. Since the landscape generally has a mottled appearance consisting of various shades of tan, desert camouflage would be the preferred paint scheme. A medium desert tan would be the preferred color if a solid color were used. Structures unavoidably skylined should be painted a light powder blue. All paint should be approved by BLM prior to actual application.
- 6. For power distribution lines (69 kV or smaller), use nonspecular conductors and insulators. If metal distribution line towers are to be used, ungalvanized metal weathering to a natural brown is preferred.
- 7. Avoid skylining of power distribution lines if possible.

Vegetation

- Keep all disturbed areas and new roads to a minimum. Waterbar and block roads that are unneeded after construction.
- Conduct a botanical inventory of all proposed road and construction sites before work begins. No surface occupancy in those areas identified as containing plants named on Table 10, of the Environmental Assessment.
- 3. Limit road construction to the minimum acceptable amount.
- 4. Prohibit all off-road vehicular travel.
- 5. Waterbar roads on grades over 75' long and 5% slope.
- 6. At the end of construction, barricade all roads not needed for maintenance.
- 7. Avoid construction of any facilities in areas shown on map 5 of the Environmental Assessment.

Wildlife

- 1. Minimize surface disturbance.
- Close new roads to public use.
- 3. Do not allow surface disturbance within 1/2 mile of gallinaceous guzzlers or other permanent water sources, if they occur.
- 4. If a guzzler or other water source is impacted, grantee must compensate with one in a new location.

- 5. Survey for mule deer, bighorn sheep, spotted bat (roosts), magic gecko, and San Diego horned lizard to provide site specific information for EAs on applications. Ungulate surveys should emphasize seasonal use and type of use (fawning/lambing, travel corridor, etc.).
- Do not allow construction in fawning/lambing areas if these are found.
- 7. Do not allow construction from February June within 1/2 mile of fawning/lambing area if found.
- 8. Do not allow development within 1/2 3/4 mile of cliff nesting areas and in foraging areas.
- 9. Transmission lines should not cross canyon mouths or ridge tops.
- 10. No construction is to be allowed near golden eagle nesting and foraging territories from January July. This mitigation can be suspended if nesting activity is not observed by March 31 of a given year.
- 11. Powerlines are to be constructed according to raptor protection guidelines (Olendorff et. al., 1981), where applicable.
- 12. Avian mortality should be monitored.
- 13. General wildlife surveys should be done on a site specific basis to determine presence of wildlife species of special concern.

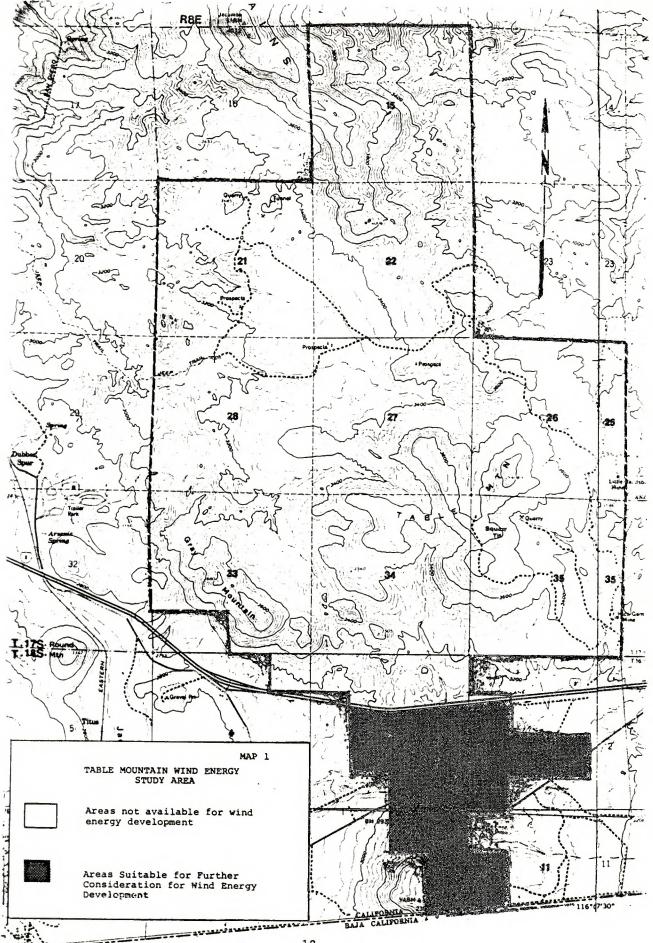
Cultural Resources

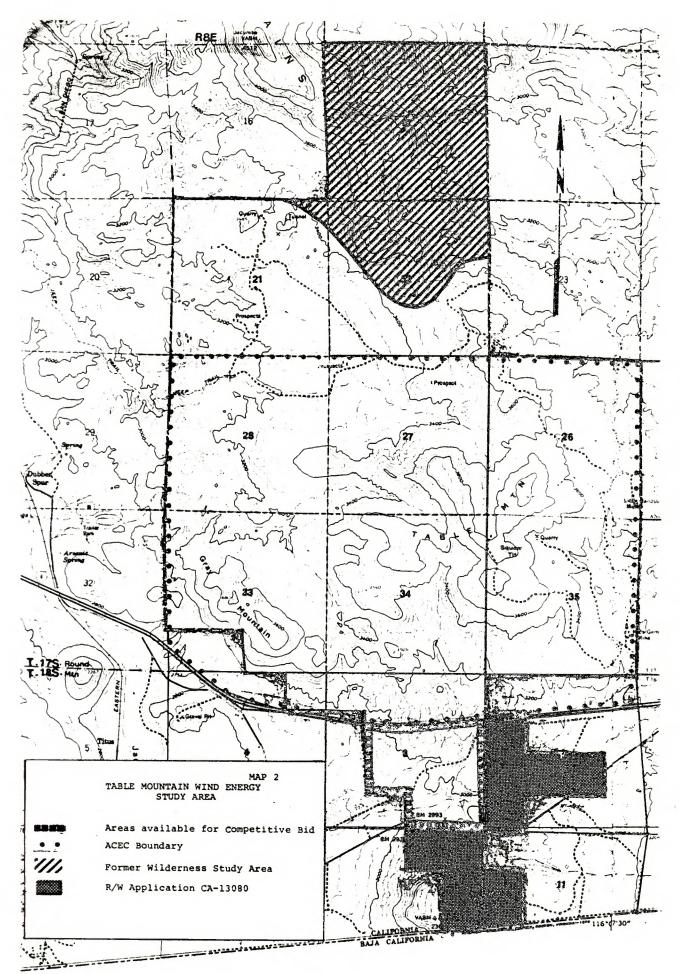
- 1. Tower sites, access roads and transmission lines may be positioned to avoid sites. (Archaeology)
- Data recovery is a possibility for archaeology.
- 3. Sites must be inventoried for archaeological values.
- 4. Site specific EAs must be written.
- 5. Denial of Project development north of Interstate 8.
- 6. Perform supplemental Native American interviews and contacts and contact appropriate Kumeyaay Reservations.

VIII Environmental Compliance & Signatures

We have reviewed the EA prepared to analyze the environmental effects of the action and have determined that the action and approved mitigating measures would not have a significant effect on the human environment. Therefore, an EIS is not required to further analyze the environmental effects of the action.

Prepared	by:	Roger Zortman, Area Manager	
Reviewed	by:	William Collins, CDD Environmental Coordinator	
I Approve	e:	Gerald E. Hillier, District Manager	





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